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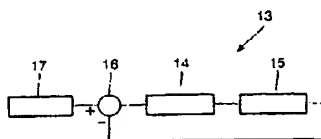
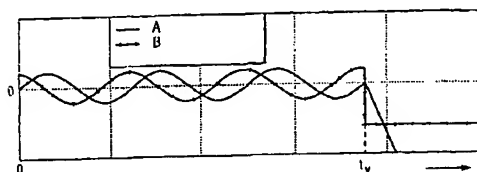
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(54) Title: METHOD OF DETECTING A MALFUNCTION DURING A DISPLACEMENT OF AN ELEMENT BY MEANS OF A DRIVE SYSTEM, AND DEVICE SUITABLE FOR CARRYING OUT SUCH A METHOD



(57) Abstract: Method and device for detecting the occurrence of a malfunction upon movement of an element (7) by means of a driving system. While the element is being moved, a difference (curve A) between a predetermined, desired value and an actual value is determined at regular intervals by means of a processor (14,15,16,17). Furthermore, a derivative (curve B) of said difference is determined by means of the processor at regular intervals, wherein said difference and said derivative both fluctuate round an equilibrium value. Following this, only the values on one side of the equilibrium value of both the difference and the derivative are taken. The values of the difference are multiplied by the values of the derivative, and the result of the multiplication is compared with a reference value by means of the processor. The occurrence of a malfunction is established if the result of the multiplication is higher than the reference value.

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# INTERNATIONAL SEARCH REPORT

International Application No.  
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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G05B19/4063 G05B19/4061

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 365 681 A (FANUC LTD) 2 May 1990 (1990-05-02) cited in the application the whole document	1-5
A	GB 1 428 635 A (WESTINGHOUSE ELECTRIC CORP) 17 March 1976 (1976-03-17) the whole document	1-5
A	US 5 214 362 A (NAITO YASUO ET AL) 25 May 1993 (1993-05-25) the whole document	1-5

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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